

In the claims:

1. (currently amended) A pyrotechnic device for simulating weapons firing and/or hit

indications comprised of:

a magazine having a plurality of receptacles for receiving a plurality of corresponding
~~blank ammunition rounds,~~

~~a stand including a base connected to a section; and~~

~~wherein the section is connected to the base in a manner which allows the section to be
tilted with respect to the base;~~

~~and further comprising means for attaching the magazine to the section so that when
the section is tilted with respect to the base the magazine is also tilted with respect to the base.~~

~~a top plate;~~

~~a bottom plate;~~

~~an electronic housing; and~~

~~a plurality of spaced electrical contacts; and circuitry.~~

2. (currently amended) The ~~pyrotechnic device~~ of claim 1, wherein

~~the magazine can receive a plurality of blank ammunition rounds of a first type, a plurality of
blank ammunition rounds of a second type, or a combination of a plurality of blank ammunition
rounds of the first type and the second type up to thirty rounds.~~

3. (currently amended) The ~~pyrotechnic device~~ of ~~claim~~ claim 1 further comprising

~~a top plate having a plurality of contacts corresponding to the plurality of receptacles of the
magazine;~~

~~a means of aligning and securing the magazine to the top plate through guide bolts and~~

~~adjustable locking hinge means respectively, in which the plurality of corresponding blank ammunition rounds are ohmically spaced to receive the plurality of contacts of the top plate, wherein all of the plurality of blank ammunition all said rounds are simultaneously engage in ohmic contact with the their corresponding contacts of the top plate; and wherein the top plate connects the magazine to the section of the stand.~~

4. (currently amended) A pyrotechnic device for simulating weapons firing and/or hit indications comprised of:

a magazine having a plurality of receptacles for receiving a plurality of corresponding blank ammunition rounds;

a top plate having a plurality of peripheral conductive discs located thereon corresponding in number to the plurality of receptacles;

wherein the magazine can be placed on the top plate such that each of the plurality of receptacles is located over a corresponding one of the plurality of peripheral conductive discs;

and wherein each of the plurality of blank ammunition rounds can be placed in a corresponding one of the plurality of receptacles so that a first contact of each of the plurality of blank ammunition rounds is in ohmic contact with a corresponding one of the plurality of peripheral conductive discs.

The device of claim 1 wherein

the magazine includes a plurality of detent pins and contacts points which properly engage operation of the device.

5. (currently amended) The pyrotechnic device of claim 4 wherein

the top plate includes a plurality of center conductive disc pads corresponding to the

plurality of peripheral conductive discs and wherein each center conductive disc pad is located at the center of the plurality of peripheral conductive discs;

wherein there is electrical insulation between each of the plurality of center conductive disc pads and a corresponding one of the plurality of peripheral conductive discs;

and wherein each of the plurality of blank ammunition rounds can be placed in a corresponding one of the plurality of receptacles so that a second contact of each of the plurality of blank ammunition rounds is in ohmic contact with a corresponding one of the plurality of center conductive disc pads while the first contact of the respective blank ammunition round is in ohmic contact with the corresponding one of the plurality of peripheral conductive discs.

The device of claim 1 wherein

the top plate contains a plurality of flanged button contacts, and wherein the device further comprises a means for securing the top plate to the electronic housing are provided:

6. (currently amended) A pyrotechnic device for simulating weapons firing and/or hit indications comprised of:

a magazine having a plurality of receptacles for receiving a plurality of corresponding blank ammunition rounds;

wherein in response to a command to fire at least two blank ammunition rounds at about the same time the pyrotechnic device fires a first blank ammunition round at a first time and a second blank ammunition round at a second time, wherein the difference between the first time and the second time is less than or equal to thirty milliseconds.

and wherein each of the first and the second blank ammunition rounds includes a bridgewire which causes the firing of the respective blank ammunition round, and wherein the

pyrotechnic device causes a first application of current to the bridgewires of the first and second blank ammunition rounds to fire the first and second blank ammunition rounds and wherein after firing the first and second blank ammunition rounds, the pyrotechnic device causes a second application of current to the bridgewires of the first and second blank ammunition rounds in order to burn out the bridgewires.

~~The device of claim 5, wherein~~

~~each of the flanged button contacts are comprised of a plug.~~

7. (currently amended) The pyrotechnic device of claim 6 wherein

the pyrotechnic device causes about six amps of current to be supplied for about five hundred milliseconds for each of the bridgewires of the first and second blank ammunition rounds in order to burn out each of the bridgewires.

~~The device of claim 6 wherein~~

~~the plug is made of a conductive material.~~

8. (currently amended) The pyrotechnic device of claim 7 5 further comprising
an electronic housing;

and wherein each of the plurality of center conductive disc pads material is in ohmic contact with one of a plurality of conductive transfer posts; and

wherein each of the plurality of conductive transfer posts runs through the top plate and into the electronic housing is stainless steel.

9. (currently amended) The pyrotechnic device of claim 7 8 further comprising
an interface circuit board;

wherein each of the plurality of conductive transfer posts is in ohmic contact with one of a corresponding plurality of bridge springs:

and wherein each of the plurality of bridge springs is ohmically in contact with an exposed area on the interface circuit board:

and wherein a central processing unit can selectively fire any one of the corresponding plurality of blank ammunition rounds located in any one of the plurality of receptacles.

~~each of the flanged button contacts are also comprised of conductive rubber, nylon-headed bushing, a neoprene washer, a nylon sleeve and a stainless steel spring:~~

10. (currently amended) The device of claim 5 4 wherein

each of the plurality of peripheral conductive discs is made of conductive rubber a top of the top plate contains conductive rubber cylindrically applied juxtaposing the plurality of receptacles of the magazine to form a plurality of electrical contact receptors.

11. (currently amended) A pyrotechnic device for simulating weapons firing and/or hit indications comprising

a magazine comprised of a plurality of receptacles having a plurality of corresponding bores for receiving a corresponding plurality of rounds of blank ammunition of a first type or a second type or a corresponding plurality of rounds of blank ammunition of a first type and a second type;

wherein each bore has upper, middle, and lower sections:

wherein each upper section has a first diameter, each middle section has a second diameter, and each lower section has a third diameter;

wherein the first diameter is less than the second diameter and the second diameter is

less than the third diameter.

wherein the magazine has a top surface and a bottom surface, and wherein each upper section begins at the top surface and ends inside the respective bore, and wherein each lower section begins at the bottom surface and ends inside the respective bore:

wherein each of the plurality of rounds of blank ammunition of the first type can be inserted into any of the plurality of bores so that at least a portion of each of the plurality of rounds of blank ammunition of the first type lie inside the upper, middle, and lower sections of the respective bore at the same time;

wherein each of the plurality of rounds of blank ammunition of the second type can be inserted into any of the plurality of bores so that at least a portion of each of the plurality of rounds of blank ammunition of the second type lie inside the upper, middle, and lower sections of the respective bore at the same time;

and wherein each of the plurality of rounds of blank ammunition of the first type is the same, each of the plurality of rounds of blank ammunition of the second type is the same, and each of the plurality of rounds of blank ammunition of the first type differ in size from each of the plurality of rounds of blank ammunition of the second type.

a top plate;

a bottom plate

an electronic housing; and

a plurality of space electrical contacts, and circuitry.

12. (currently amended) The pyrotechnic device of as claimed in Claim claim 11 wherein

each of the plurality of rounds of blank ammunition of the first type is an M30 round and each of the plurality of rounds of blank ammunition of the second type is an M31 round.

~~wherein~~

~~the circuitry includes a source of electrical power source which provides electrical power to the electrical contacts.~~

13. (currently amended) The device as claimed in Claim ~~4.12~~ wherein further comprising
an electronic housing comprised of circuitry;
wherein the circuitry provides for self-testing.

~~the circuitry can delay the application of electrical power to the device and conduct validation functions for the device, prior to device ignition.~~

14. (currently amended) The device as claimed in Claim ~~4.13~~, further comprising wherein
an electronic housing comprised of circuitry;
wherein the circuitry provides the capability of fifteen programmable firing sequences
and igniting one or more of the plurality of blank ammunition rounds the received round in the
secured magazine.

15. (currently amended) The device as claimed in Claim ~~44~~ 4, further comprising
an electronic housing comprised of circuitry wherein
the circuitry can perform a special ignition application.

16. (original) The device of claim 15 wherein
the special ignition application is an anti-personnel application.

17. (withdrawn) The device of claim 15 wherein

the special ignition application is an anti-tank training application.

18. (withdrawn) The device of claim 15 wherein

the special ignition application is a mine dispensing simulation.

19. (withdrawn) The device of claim 15 wherein

the special ignition application is a car or truck bomb simulation.

20. (withdrawn) The device of claim 15 wherein

the special ignition application is a Claymore simulation and urban MOUD training.

21. (currently amended) A pyrotechnic device for simulating weapons firing and/or hit indications, comprising

a magazine comprised of a plurality of receptacles for receiving a corresponding plurality of rounds, the magazine having an underside surface;

wherein a plurality of safety interlocks are located on the underside surface of the magazine;

further comprising a top plate having a top surface on which are located a plurality of contact pads which correspond in number to the plurality of safety interlocks;

wherein the magazine can be placed on top of the top plate so that the underside surface of the magazine lies on top of the top surface of the top plate and each of the plurality of safety interlocks on the magazine comes in ohmic contact with a corresponding one of the plurality of contact pads on the top plate;

and wherein the pyrotechnic device does not arm when power is applied unless each of

the plurality of safety interlocks on the magazine is in ohmic contact with a corresponding one of the plurality of contact pads on the top plate.

~~a bottom plate;~~

~~an electronic housing;~~

~~a plurality of space electrical contacts, and circuitry.~~

22. (currently amended) The pyrotechnic device of claim 21 further comprising, wherein

a latching device which latches the magazine to the top plate, wherein the latching device causes each of the plurality of safety interlocks on the magazine to come in ohmic contact with a corresponding one of the plurality of contact pads on the top plate.

~~the electronic housing has a cavity containing the circuitry and further comprising means to secure the circuitry in the electronic housing~~

23. (currently amended) The pyrotechnic device of claim 21, further comprising wherein

an electronic housing including circuitry, wherein

the circuitry is located on a circuit board, and the circuitry comes in ohmic contact with the plurality of contact pads on the top plate connects bodies of button contacts secured to the mating plate for igniting the received rounds in the magazine in a manner creating a hermetically seal therewith.

24. (currently amended) The pyrotechnic device of claim 24 23, wherein

the circuitry is located on a circuit board, and the a remote control signal can be used to operate the circuitry and thereby operate the pyrotechnic device can accept operation of the device via remote control.

25. (withdrawn) A method comprising

attempting to fire a plurality of pyrotechnic rounds from a corresponding plurality of chambers from a firing apparatus with a single fire command; and

if one or more of the pyrotechnic rounds did fire, re-applying enough electrical energy to burn out a bridgewire of one or more pyrotechnic rounds that did fire.

26. (withdrawn) An apparatus comprising

a bored magazine adaptable for use in a pyrotechnic device for simulating weapons firing and/or hit indications

wherein the bored magazine is comprised of a plurality of chamber locations; and

wherein the bored magazine is capable of accepting both M30 or M31 type rounds in any one of the plurality of chamber locations.

27. (withdrawn) An apparatus comprising

a light emitting diode test block that is used to test the function of a pyrotechnic device for simulating weapons firing and/or hit indications.

28. (withdrawn) The apparatus of claim 27 wherein

the light emitting diode is also capable of verifying a mode of operation that the pyrotechnic device is setup for.

29. (new) The pyrotechnic device of claim 8 further comprising

a plurality of non-conductive washers, each of which is placed around one of the plurality

of transfer posts, wherein there is at least one non-conductive washer for each of the plurality of transfer posts;

wherein there are a plurality of bored holes in the electronic housing;

wherein each transfer post lies at least partially inside of one of the plurality of bored holes in the electronic housing, wherein there is one transfer post for each bored hole;

and wherein each of the plurality of non-conductive washers forms a seal between the top plate and the electronic housing so that no liquid can enter the electronic housing through any of the plurality of bored holes.

30. (new) The pyrotechnic device of claim 29 wherein

each of the plurality of non-conductive washers is a neoprene washer.